



#### SEDIMENT BASIN

# **DEFINITION & PURPOSE**

A sediment basin is a temporary settling pond designed to slowly release runoff, detaining it long enough to allow sediment to settle out. Sediment basins may also be retrofitted to permanent stormwater detention or retention basins after construction has ended.

### CONDITIONS FOR EFFECTIVE USE

The basin should be designed by a registered design professional. Sediment basins are required by the state land disturbance permit for each drainage area with 10 or more acres disturbed at one time and shall be sized to contain a volume of at least 3,600 cubic feet per each disturbed acre draining thereto. Other similarly effective BMPs can be specified if a sediment basin is impractical. Sediment basins must have a stabilized spillway and utilize outlet structures that withdraw water from the surface unless infeasible. Basins should be located as close to the sediment source as possible. A sediment basin should not be used in areas of continuously running water (live streams) or in areas where failure of the embankment will result in loss of life, damage to homes or structures, or prevent the use of roadways or utilities. See MDNR Guide Section 6-209 for additional guidance.

# INSTALLATION/CONSTRUCTION PROCEDURES

Sediment basins should be constructed according to the design plans prior to disturbance of the drainage area.

## OPERATION & MAINTENANCE PROCEDURES

Inspect every week and within 48 hours after every rain event that causes stormwater runoff to occur on-site. Remove trash accumulation at outlet. Remove sediment accumulations at a minimum when the basin is 50% full. Any sediment accumulation must be removed prior to converting the sediment basin into a permanent stormwater basin. If not removed, the accumulated sediment reduces the basin's capacity and makes it difficult to achieve adequate vegetation. Repair and reseed any erosion damage on spillway. Repair settlement, cracking, piping holes, or seepage at embankment. Replace gravel around riser if basin does not drain properly.

### SITE CONDITIONS FOR REMOVAL

If the basin is to be converted to a permanent stormwater basin, it will remain in place. For temporary sediment basins, remove after upstream areas are stabilized. Grade surface as appropriate and vegetate immediately.

### **ALTERNATIVES**

• Sediment Traps and Check Dams

# **COMPANION BMPs**

Gravel Bags